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ORIGINAL ARTICLES

EYE SYMPTOMS AS AN AID IN GENERAL DIAGNOSIS.

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The eye affords valuable aid in the diagnosis of various nervous affections and constitutional diseases with which the general practitioner should be familiar.

Time will not permit even the enumeration of all the eye symptoms which may develop during the course of general diseases, therefore we will limit ourselves to those which are premonitory, and hence of diagnostic importance.

Anesthesia of the *lids,* either partial or complete, with false localization of sensation, is a symptom of tabies dorsalis or syphilis.

Oedema of the *lower lid,* with grayish white or waxy color of the skin, denotes nephritis or organic heart disease.

Eczema of the *lid* is often dependent on a scrofulous diathesis, but in many cases is due to eyestrain from refractive error, and occasionally accompanies diabetes.

Styes are usually caused by eyestrain, but may come from disorders of digestion or menstrual irregularities.

Nodules in the *lids,* while usually chalazion (retentive cysts of the meibomian glands), may be tubercular; if hard, whitish, pale-yellow or reddish color, accompanied with infiltration of the subcutaneous tissue, are probably leprous.

Retraction of the *upper lid* is an early symptom of meningitis and usually accompanied by mydriasis and partial or complete transitory blindness.

Lagophthalmus—inability to close the lids—is associated with paralysis of the muscles of the face owing to their common innervation by the facial nerve, and indicates the peripheral nature of such a paralysis, for in 90 per cent of facial paralyses of central origin the orbicularis and frontalis muscles escape.

If there is imperfect closure of the lids, look for ear disease, tabes or syphilis, unless in very sick people when it may come not from paralysis, but from lack of sensibility of the cornea and conjunctiva, so that the natural stimulus to close the eye is lost. Diminished frequency of winking from the same cause also occurs in Basedow's disease, or exophthalmic goiter, and is known as Stalwag's sign or Dalrymple's symptom.

A spasmodic action of the levator of the upper lid (Abadie's sign) is another symptom of Basedow's disease, and Von Graefe first called attention to another characteristic feature of the affection, a spasm of Muller's muscle, causing a widening of the palpebral fissure; this is noticed when looking downwards, when the lids lag behind, so that a white strip of exposed sclera is seen above the edge of the cornea. This is a characteristic symptom of exophthalmic goiter, and together with the Stalwag's sign gives the peculiar staring expression of such patients, and renders the exophthalmus more noticeable. Starkey found Von Graefe's sign in 601 out of 613 cases. It is an early symptom, and may for a considerable time be the only feature of the case; it may affect one or both eyes, or one more than the other.

Ptosis, or drooping of the upper lid, is often caused by posterior spinal sclerosis and designated sympathetic ptosis. The congenital is supposed to be due to "congenital central defect." There is also an hysterical ptosis, but these forms are to be distinguished from true paralysis of the levator muscle.

Paralytic ptosis may result from a peripheral neuritis, as occasionally occurs after exposure to cold and from alcoholism, or from a lesion of the third nerve anywhere in its course from its nucleus of origin to the orbit. An isolated paralysis of the third nerve is usually of nuclear origin, but it may be caused also by a circumscribed lesion of the cortex of the frontal lobe of the cerebrum, just in front of the fissure of Rolando. The fibres of the third nerve decussate in their intracerebral course, so that destruction of this centre causes ptosis of the opposite side. The cortical centres for the motor nerves of the eyeball are a considerable distance from this point and hence we have ptosis sometimes as an isolated paralysis, and such an occurrence is a valuable point in the location of cerebral symptoms having this association.

Ptosis is often present in tabes, in syphilis, and sometimes in paralysis agitans.

Conjunctivitis is often present in scrofula, sometimes from indigestion, usually from dust, cold or bright light, and many cases are due to eyestrain and are only relieved by properly fitting glasses. Phlyctenular conjunctivitis is often due to nasal diseases, Knies claiming that 90 per cent are from nasal trouble. Catarrhal conjunctivitis accompanies the prodromal stage of measles. Conjunctival hemorrhages indicate an atheromatous condition of the arteries, and are frequent in diabetes owing to the vascular degeneration which occurs in that disease.

Oedema of the *conjunctiva* frequently accompanies meningitis, as an early diagnostic symptom.

Scleritis is usually caused by rheumatism, tuberculosis or syphilis.

Keratitis phlyctenulosis is common in so-called scrofulous subjects, and in children with obstruction and inflammatory diseases of the nasal passages. Tuberculosis of the lymphatic glands is present in fully one-half of the cases and evidence is daily increasing that this condition is closely connected with tuberculosis and probably caused by it.

Keratitis interstitialis is, according to Mauthner, due to syphilis in four-fifths of the cases, but may accompany infectious diseases or rheumatism.

Keratitis, ulcerative, occurs in diabetes and in debilitated people.

Iritis may be syphilitic, rheumatic, gonorrhoel, diabetic, tuberculous, scrofulous, autoinfectious, infectious, autotoxæmic, toxæmic or traumatic, but seldom appears early enough to be of diagnostic aid. Syphilis is estimated by various authors to be the cause of 25 to 75 per cent of the cases. The latter is undoubtedly the nearest correct; it is most frequent in the secondary stage of the acquired form. In children it is usually a manifestation of hereditary lues.

Iritis from autoinfection usually comes from ear disease, sinusitis or dental disease.

Mydriasis (dilated pupil) may be spastic or paretic. The spastic comes from stimulation of the sympathetic motor nerves, and the widely dilated pupil contracts with efforts of accommodation and upon stimulus of light. Paretic mydriasis is accompanied by loss of light reflex. It presents a partially dilated and immobile pupil in contrast to the widely dilated and sensitive pupil of the spastic variety.

Spastic Mydriasis may affect one or both eyes and indicates an irritation of the ciliospinal centre situated in the lower cervical and upper dorsal region of the cord, or in the cervical sympathetic; this irritation may be direct or reflex.

Direct irritation exists in the early stages of all inflammatory diseases of the spinal cord and its membranes in this locality, such as spinal meningitis, spinal congestion, neoplasms, and in the so-called "spinal irritation" which is frequent in nervous and chlorotic young women. It is also a premonitory sign of tabes dorsalis.

Reflex irritation results from irritation of the skin and accompanies extensive burns and urticaria. Pinching of the skin at the back of the neck causes mydriasis in certain cases of meningitis and is known as Parrot's sign. Intestinal worms cause spastic mydriasis by reflex action; also disease of the apex of the lungs, and aneurism of the aorta

and arteria innominata. In the latter cases the mydriasis is on the side of the lesion. Cerebral affections with increased intracranial pressure, and certain mental states, fright, acute mania and melancholia are sometimes associated with this kind of mydriasis.

Paretic Mydriasis, when monocular and accompanied by paralysis of accommodation, is to be regarded with suspicion, as suggesting the approach of general paralysis of the insane.

Wernicke's sign, or "hemianopic pupillary inaction," is a trustworthy guide in the diagnosis of the situation of a lesion causing hemianopic visual disorders. If light thrown upon the blind portion of the retina causes contraction of the pupil, it demonstrates that the cause of the lesion is above the reflex path for the pupillary response to light stimulus. The converse, namely, lack of contraction of the pupil, is conclusive evidence that the lesion is at the optic thalmus, or between it and the optic nerve stem.

When hemianopic pupillary inaction exists without concomitant hemianopic visual defect, it indicates that the lesion is between the nucleus of the third nerve and the optic tract. This symptom is known as Knies' sign, and when observed is of definite value in localization.

In cases of sudden blindness, also the presence or absence of the light reflex, is of service in determining the location of the lesion causing it, for, as we have seen in the case of hemianopia, if it is due to cortical disease affecting the higher centres beyond the "belt line," so to speak, the light reflex will be preserved, while it will be lost in affections of the retina, optic nerve and tract.

An isolated paralysis of the constrictor fibres of the iris, without other signs, points to a circumscribed lesion, probably syphilitic, in the anterior part of the floor of the fourth ventricle, affecting only that part of the third nucleus from which arise the fibres supplying the iris; this may be monocular, but is usually binocular.

Cortical paretic mydriasis is bilateral and associated with conditions of increased intracranal pressure which compress the third nerve, such as tumors and hydrocephalus.

The presence of mydriasis is a valuable point of differential diagnosis between apoplexy and embolism, as in the latter the pupil is unaltered.

In *concussion* of the brain we find a sluggish pupil without marked dilatation or contraction, in *compression* we find one or both pupils dilated and sluggish.

Mydriasis may be a premonition of uræmic intoxication, hence the condition of the pupils should be carefully watched in cases of nephritis where this condition threatens.

Mydriasis with loss of accommodation should awaken a suspicion of syphilis, for three-fourths of such cases are syphilitic in origin according to Alexander.

When the iris contracts with the efforts of accommodation and convergence, but not with the stimulus of light, we have the so-called "Argyle-Robertson pupil," which is a very valuable diagnostic indication in locomotor ataxia and paresis or progressive paralysis of the insane. Its presence demonstrates a lesion affecting the fibres extending from the tubercula quad rigemina to the third nucleus. Since there is no impairment of vision and no loss of voluntary motion, it is evident that the primary optic ganglion and the third nucleus are unaffected.

The Argyle-Robertson pupil is found in about 70 per cent of cases of tabes, and in about 25 per cent is an early symptom. It is estimated that it occurs in half of the cases of paresis.

Hemianopsia, or partial or complete loss of sight, affecting one-half of each visual field, may be classified as heteronymous or homonymous.

Heteronymous hemianopsia may be bitemporal, when the nasal half of each retina is defective; or binasal, when the temporal half is affected. The dividing lines between the seeing and non-seeing areas may or may not pass through the fixation point, and the blindness may be partial or complete.

Ranney classifies the hemianopsias accord-

ing to retinal condition instead of according to the field of vision affected; his nomenclature is anatomically correct, but is not in accordance with the classification of other authors, hence is misleading.

Either form of heteronymous hemianopsia indicates an affection of the chiasm and is strongly suggestive of syphilitic gumma, for gummous meningitis at the base of the brain is, next to endarteritis, the most common form of brain syphilis, and the most frequent situation is at or near the chiasm. Temporal hemianopsia, as a result of syphilis, occurs, it is estimated, twice as frequent as hemianopsias from lesions back of the chiasm. Medial or binasal hemianopsia must come from an affection of the uncrossed bundles of fibres of each tract, and therefore the lesion is to be located at the outer edge of the chiasm on each side; this condition is rare, but may come from accumulation of fluid in the third ventricle, with hydrops of the infundibulum or from atheromatous degeneration of the "Circle of Willis."

Homonymous hemianopsia, that form affecting the corresponding portion of each visual field, right or left, is caused by a lesion affecting the fibres of one optic tract, and may be situated at any point between the chiasm and the cortex; often in the thalmus but most frequently in the cuneus, in which case there is no loss of mobility or sensibility. If accompanied by choked disc it is especially diagnostic of tumors at the base of the cerebrum, and is a positive contraindication to trephining. If accompanied by "hemianopic pupillary inaction" it may be from a syphilitic gumma (the most frequent cause), or other neoplasm, or by a hemorrhage in the optic tract or in the pulvinar.

When caused by disease in the course of the optic radiations, or in the cortical visual area, the pupillary light reflex is preserved.

Homonymous hemianopsia may occur suddenly as a sole manifestation of cerebral hemorrhage; here again the presence of pupillary light reflex points to a lesion in the path of the optic radiations.

The cortical visual area occupies the entire extent of the internal surface of the occipital lobe, embracing the cuneus and the fusiform lobes, being bounded anteriorly by the internal perpendicular fissure, above by the superior edge of the hemisphere, below by the inferior edge of the third occipital convolution, and behind by the occipital lobe. Different portions of this area are in relation with distinct parts of the field of the opposite eye, according to Knies. "The macular region corresponds to the cuneus and perhaps to the first occipital convolution. In the remainder of the cortex the anterior part corresponds to the inferior part of the opposite field, the lateral part to the outer, and the posterior part to the upper portion of the field. Hence in partial destruction of the occipital cortex, the visual disturbances vary greatly according to the location of the diseased focus."

Amaurosis and *Amblyopia.* Monocular blindness points to an affection of the optic nerve in front of the chiasm, or to an intraocular affection. Cortical disorders are always binocular and are attended with preserved pupillary reaction. Meningitis of the convexity of the brain with exudation may occasion such loss of vision. It may result from extreme loss of blood. It may be of toxæmic origin, especially in uræmia. Associated symptoms will aid in the diagnosis.

Paralysis of External Ocular Muscles. Total paralysis of an ocular muscle is easily diagnosed, but with partial paralysis there is often no apparent loss of motion, and the paresis is only manifest by the resultant diplopia; and that may only be noticed when the eye is turned in the direction of the weak muscle.

An ocular paralysis due to a disease of the orbit will be unilateral and lacking symptoms of intracranal and cerebral or spinal disease. The association of the muscles affected will settle the diagnosis of its peripheral nature, as for instance, if the inferior oblique and the internal ocular muscles (iris and ciliary) are affected without implication of other external muscles. This is evident if we remember the iris and ciliary muscles are supplied by the

short ciliary nerve coming from the ciliary ganglion situated back of the orbit, between the optic nerve and the external rectus, and that the motor fibres of the ciliary ganglion are derived from the branch of the motor-oculi which supplies the inferior oblique, after its division from the main trunk.

External Ocular Paralysis of *Basilar Origin* would almost of necessity be accompanied by other nerve affections, so that the diagnosis would rest on their association, especially of hemianopic visual disturbances from compression of an optic trunk. When the trigeminus is paralyzed by a basilar affection, it is preceded by neuralgia.

Paralysis of both third nerves may result from the pressure of a tumor, a syphilitic gumma, for instance, between the crura-cerebri or from an aneurism of the posterior cerebral artery. A thrombosis of one cavernous sinus or an aneurism of one internal carotid might cause total paralysis of the muscles of one eye.

Intracerebral Paralysis. Paralysis of the motor oculi on one side with hemiplegia of the opposite side without involvement of the iris and ciliary muscles come from a lesion in the crus.

Paralysis of one external rectus and the extremities of the opposite side indicate a lesion at the posterior edge of the pons.

An isolated lesion of one-sixth nerve comes from a lesion in one side of the pons.

Since the sixth and facial have a common origin in the gray matter in the floor of the fourth ventricle, a nuclear lesion must affect both nerves.

In apoplexy, if the eye turns toward the paralyzed side, we have an alternating paralysis, and the lesion is in the pons on the opposite side. If the eye turns toward the sound side, the hemorrhage is in one or other hemisphere above the pons, and on the side towards which the eye turns.

In adults ocular paralyses are very suggestive of cerebral syphilis, and usually appear in the latter stage of the disease. The third nerve is affected in three-quarters of such cases and the sixth in one-quarter. It may be a nuclear lesion, a neuritis of the trunk or root of the nerve, or it may be compressed in its course along the base of the brain by a gumma. Such a paralysis is often the initial symptom of cerebral syphilis. One variety, where several muscles of both eyes are affected successively and transiently, varying in degree and duration, is considered almost pathognomonic of the cerebral form of this disease.

Ocular palsies with similar manifestations are also very frequent in locomotor ataxia or tabes.

Multiple sclerosis and general paralysis also give rise to ocular paralysis of similar character. Other symptoms will be present to establish a differential diagnosis.

Disease of the cerebral vessels, resulting from diabetes and renal affections, may be the cause of ocular paralysis, hence an examination of the urine should not be neglected when a satisfactory explanation has not been reached.

Time does not permit the consideration of retinal changes revealed by the ophthalmoscope, which are sufficient for a paper of itself.

A FEW REMARKS ON PSYCHOLOGY IN THE PRACTICE OF MEDICINE.

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In bringing the subject of psychology in the practice of medicine before you, the writer fully realizes his inability compared with the vastness of the subject. However, the writer's motive in presenting this paper, is the very importance of this subject and that your attention may be enlisted with the duration and tensity which will put into action the mind and individual conscience of every physician and arouse the mental efforts into a working harmony with the forces of each individual's conscious self, so that the practice of medicine will be recognized and honored with the proper honor and respect of both the medical profession and the laity.

Webster defines psychology as "The sci-

ence of the soul. Specifically that systematic knowledge of the functions of the human soul as are known to consciousness." The various authors divide the subject of the mind into the objective and subjective, for convenience of studying psychology. The objective mind being composed of the five special senses plus reason; the subjective mind being composed of the emotions plus the will. But for a definition of the soul, as we wish to refer to it, let us accept "the actual personality of the individual's conscious mind." Therefore the importance of psychology in the practice of medicine. The soul, or the actual personality of the individual's conscious mind, certainly portrays to every individual mind a condition of material and circumstances just as they really are. This being true, at first makes the individual a being of understanding — the physician conscious of himself, his attainments, his abilities (also his inabilities), and of the material about him and the circumstances governing both he and all the surroundings; then upon this state of affairs, with the directions of reason, the consent of the will, the individual is able and is in a position to execute and transact matters in such a degree as to cause the public to refer to them as miracles.

The psychological functions, trained and practiced in medicine with the parallel of objective sense training, would within a very short time set the practice of medicine upon the pedestal of honor and respect commensurate with the wisdom and benevolence implied in its beloved title. The objective mind, thoroughly trained in the elementary branches of medicine, and the soul (the actual personality of the individual's conscious mind), trained in the harmonious proportion, would turn out a specimen of medical doctor that would prove an agreeable surprise even to the leaders of our profession.

This training is of nearly as much importance as the objective sense training, for upon its laws the practice of medicine makes men do with exhausted minds and bodies that which money can not influence.

When the forces of the psychical mind have actuated deeds that have saved individuals and nations, and have elevated the standard of manhood into the likeness of our great Creator, then why or how can our great leaders of our noble profession go on in silence, and not provide for adequate training of the psychological mind and awaken to the vital demands of the conscious cries of a full medical education? May those who think of the psychologic mind and its conscious working forces in the sense of superstition and as a relic of barbarism, ponder the meaning of the actual personality of the individual conscious mind. May our leaders and educators awaken and establish in every college of medicine a course in their curriculum that teaches human psychology.

In this age of progressive medicine and surgery, and especially the enormous energy put forth and the benevolence manifested on the part of the medical profession in preventive medicine, there is much to show appreciation for on the part of every student for what the medical profession has done and is doing. And fully realizing this condition, let us consciously awaken to the full appreciation of our benevolent calling and ask ourselves why such things as these continue to be. Why is it, and is it right to continue in the unsatisfactory condition of having our profession looked upon by our patients and the public as an indefinite science and continuously bearing the suggestion (even though slight) at times the tint of mysticism? Gentlemen, every student can study this problem, and do it with two objects in view: First, the thoroughness of preparation, so that diagnosis will not be a matter of supposition on the part of the doctor and the administration of therapeutics may act with physiological precision. Second, the elementary knowledge in psychology that the patient's emotions and passions may be measured with such a degree of accuracy that if the patient will not cooperate heartily with all the measures offered for his convalescence, then the doctor in charge is aware of his patient's psychological condition and if he can not regulate by suggestion a hearty

cooperation of that patient, it is the choice of wisdom and an act of courtesy to the patient, and an act of self-respect to the doctor and the medical profession, to dismiss that patient and frankly tell him why.

The medical man who is aware that he is an actual personality and has an individual conscious mind, can practice his profession and dismiss or turn away patients that he can not help with as much grace as he accepts new patients that turn his way. Again, why is it, and is it right that the medical profession is looked upon as a class of men who earn their living without much effort, and should accept their fee after all other creditors have been paid? Gentlemen, this question plainly reflects the feeling of a complex society and I leave the question with the assurance that there is a place for psychological teaching and training in the career of every doctor's life. Again, the medical man, psychologically trained and with the guidance of reason, would not today confront such questions decided by legislatures as these. Why is society taxed and burdened for caring for millions of helpless mental and physical degenerates? Is it not disgusting to think that sociological economy as is now practiced in many respects is not economy, but designedly extravagance? How does the medical man feel when a little mother asks him to keep her from bearing more children till she is more able to care for them properly? This same little mother already with five or six children, some sick, all hungry and poorly clad; her fondest hopes of girlhood completely obliterated by drudgery. You are now asked what do you or can you do? Inform your patient that in pleading for help and deserving mercy that there is a legal statute fixing a fine of $5,000 and one year imprisonment for helping her case.

In the name of the medical profession and with an eye ever watchful for the progress of society and ourselves, we must here appeal to you that this condition of society will ever be until medical men realize the fact "that he is an actual personality and has an individual conscious mind and is a licensed member of the most benevolent calling in the world."

Again, why is it, and is it right that we resort to surgery, operate on our women trying to save their bodies from venereal germs, when we are conscious that the young daughters and sons of our nation are being constantly inoculated by the virus of ignorance in society?

Gentlemen, we who have children surely have a cause to put forth untold energy in seeing how our children's lives may be tided over this chasm of danger that has engulfed and blighted so many innocent lives.

Gentlemen, the medical man is trained objectively and his reason is clear how to intelligently dispose of this matter, but the psychical mind of the individual here is lacking in that vital essence of knowledge or psychological training to enforce a harmonious activity of the conscious mind in a practical working with the sense of reason.

Again, why are patients constantly leaving the medical profession in search of assistance, and in a great many cases do find relief in and under circumstances that reflect hazardously upon the medical profession, also upon society?

Gentlemen, every doctor knows the kind of assumed sickness these patients have, and we know that they have no pathological or fundamental distress; and we also know that if left alone or assisted by the aid of a wrong diagnosis that they do grow worse and their bodies functionate contrary to the normal routine in health, and we do know that these patients are almost uncontrollable in their many a good physician will compromise with these patients and give them a placebo. We also know that the anxieties of this class of patients are almost uncontrollable in their desperate effort for relief; we know, too, that these people are more uncomfortable than if really sick and in proportion they really outnumber the organically sick ones. We know that they call for help first from the medical profession, and real help is rarely given them; we try to help them, for we realize that they are growing worse, but, alas, we give these patients a diagnosis, calling it in many

instances "a general breakdown of the nerves" and prescribe much drugs. The patient returns again and again, the same search goes on, and more drugs are given till finally a drug habit is created, unless by chance the patient in despair tries the last resort—the so-called Christian Science Tribe.

Gentlemen, our ignorance of the psychological laws that control the functions of every organ and body-cell have furnished and are furnishing patients daily to an organized class of so-called scientists that are absolutely ignorant of the medical advantage given the doctor by an objective mind education of all the elementary branches of medicine, but these same so-called scientists have cured, so to speak, by psychical training that which the doctor failed to cure. I tell you truly that if the medical profession would train themselves in psychology and apply its forces in harmony with the objective sense training of a practical medical education, real conditions and results in the practice of medicine would be more nearly what they should be instead of what they seemingly are.

Summarizing: Time and space forbids justice to this vital subject on this occasion; but to again remind you—

The harmonious training of both mental and psychical minds is presented to you that the importance of psychology in the practice of medicine will appeal to you every time the title M. D. engages your attention and that the *intelligent reasoning* mind will cooperate with the *understanding psychical* mind in the future every time a patient applies to the medical profession.

That your attention will ever hold in unmistakable evidence that the actual personality of the conscious mind of an M. D. is his psychological mind—the *real man.*

That this individuality of the conscious mind in the practice of medicine in conjunction with the reasoning senses is capable of knowing the exact condition of material and psychical forces of our individual self, as well as our patients.

In closing this paper I truly hope that at an early date a true construction on psychology and its relations to the practice of medicine, which will result in the elevation of our profession to that benevolence implied in the title, Doctor of Medicine, will be placed before you for your thoughtful consideration.

THE VISITING NURSE — AS A MEMORIAL.

CHARLOTTE LATHAM PAINE.

In a little Pennsylvania town, several years ago, occurred a wedding of more than usual interest. A young woman of wealth and position, exquisite in mind, body and spirit, married a man of fine character and high ideals. For one year, a year filled with joy and happiness, they lived together in New York. Then again, her father's house in the little town was filled with flowers, and she and her baby daughter lay sleeping among them.

It seemed a devastating sorrow, not to be explained or alleviated; only to be borne. As the months went by, the desolate young husband's mind was filled with a desire to raise up a fitting memorial to her—one that should express her beautiful life and keep her name in loving remembrance.

She had had a sweet way in her girlhood of going among those who were sick or sad, bringing them cheer and comfort as well as material help. An idea dawned upon the young man's mind — grew and expanded. Why should not a visiting nurse be installed in the little town where she had lived?

When he voiced the idea there were some who discouraged him—"it wouldn't work"—something handsome along other lines would be the thing. Others saw the difficulties but felt with him that a memorial for that sweet life should be a living one.

So after a short time, on one auspicious New Year's Day, the nurse arrived. She was quite young, very capable and independent. She was introduced to all the doctors and the clergymen of the village. A committee was appointed, not to manage the nurse's work, but as a court of appeals, and with a treasurer to manage the financial end, for the town

preferred to shoulder the local expenses, such as drugs, supplies, and telephone and livery bills.

So her work began. It was a long, hard winter of bitter cold, and there were pneumonia cases that she pulled through in a masterful way; there were sick babies and new babies to be looked after, and lingering tuberculosis patients that never had known or dreamed of the comfort a trained nurse's visit once a day could give them. In a short time it was seen that the trouble was not in persuading people to allow the nurse to come in, but in allowing her any time to sleep, eat or rest, so many were the demands upon her, and so dependent did people become upon her services.

Committees were formed in every church to find supplies for the work—sheets, towels, baby outfits, nightgowns, etc., were furnished. Broth, fruit, etc., were sent where there was need of such things, and the nurse herself often shared in furnishing delicacies.

The whole story in itself could be written about the part this nurse and the committees took during the terrible typhoid fever epidemic when one out of every five persons in the town was stricken. A corps of visiting nurses and a supply station for relief with a regular staff of workers were established, and their work was constant and untiring, although two emergency hospitals were instituted and private nurses were everywhere. It was not long after this that in recognition of the way in which the work had increased, taking the nurse into the country round about and to many of the nearby villages, a generous friend provided a little Ford runabout for her use, increasing by a large ratio the field of her usefulness.

One of the best sights this town affords is the nurse in her immaculate uniform driving about in her little car which almost seems to proclaim of itself its mission. Many a story could be told of wild rides through storms and snow-drifts with the doctors, long fatiguing nights spent in hard work to save a life —perhaps two lives; drives alone over rough back roads at night where no doctor was at hand, to bring a baby into the world. In isolated farmhouses where women lie sick and unattended, her visits are hailed with joy that is pathetic to see.

This little town has acquired some great improvements in the last six years—a public library, an improved school building, a sewer system, an active civic club, a splendid civic building—but nothing has ever happened that can compare with the good the visiting nurse has brought. What memorial could possibly be thought out that could bring a dear name into so many hearts and upon so many lips with a blessing! Could good come out of evil, or happiness and blessing out of sorrow in a more striking way than this?

When one thinks of the enormous sums of money that go into memorials in wood and stone, objects of beauty, perhaps—not always that, even — and considers what it would mean to have one visiting nurse installed in each of several towns instead of these meaningless shafts and pillars and sometimes monstrosities, one wonders why it has not been done often and often, until every village has its visiting nurse, bearing the dear name as she goes on her rounds farther and farther into the hearts of those who knew and loved her, and making it a blessed sound to those who never knew it before.

If only this little sketch might inspire some one to install just one more memorial nurse in some little town! The need is always there though not always realized, but, once in operation, the work is recognized as full of untold blessings to him who gives no less than to those who take.

Our land is filled just now with those who are mourning the loss of a splendid son, husband, or brother, and whose last hours may have been made bearable by one of these wonderful women who went over as nurses. Perhaps many of these mothers or fathers, sisters or wives are seeking a fitting memorial. To make it in this same way, a living glorious thing to commemorate the splendid young life that went out in battle for the right, would be, indeed, a blessed work.—*The Red Cross Bulletin.*

MIAMI AND DADE COUNTY, FLORIDA

Miami, known as the Magic City in the land of palms and sunshine, is the most southerly point on the mainland of the United States, therefore situated in the subtropical zone under the benign influence of the soft air, gorgeous foliage and rich vegetation of the tropics while escaping entirely the too severe heat and enervating lassitude of the realms to the south. Situated on Biscayne Bay, which is one of the finest land-locked harbors in the United States, and on the Atlantic Ocean, Miami is blessed with one of the most equable climates in all the world, as the climate of any region depends, first, upon its location to the distribution of land and water, and, second, upon its latitude. The winds are constantly from the east and southeast and since they blow from a surface, the temperature of which is from 80 to 83 degrees, excessively high summer temperatures are unknown. The average maximum temperature during the summer months is under 88 degrees and the average daily temperature is 82 degrees, every day being practically the same so far as temperature is concerned throughout the summer.

Miami is known throughout the world as the "Winter Garden of America" and also as "America's Winter Playground."

The last city directory gives a population of 32,000 and about the same number are contained in the county outside of the city.

The Florida East Coast Railroad is at the present time the only one giving rail connection, but within a short time at least two additional railroads will be constructed across the famous Everglades, affording better transportation facilities, which are badly needed.

After many drawbacks, deep water seems assured, as a twenty-foot channel will be available to the municipal docks and warehouses in the very near future. Steps are also being taken to secure twenty-five or thirty feet of water, thus allowing all coastwise vessels to make Miami a port of call.

The government of the city is vested in a mayor, who holds office for two years, and a common council consisting of seven members, two of whom are elected for four years. From the council, committeemen are chosen for various departments of the city.

In Dade county, including the city of Miami, there are twenty-eight schools, all of fireproof construction built with the idea of plenty of air and sunlight. In establishing these schools particular attention has been paid to surroundings and an abundance of playground room has been reserved.

Domestic science is taught all over the county and canning clubs are a part of the educational system under special expert instructors. There is also an Agricultural High School at Lemon City and immediately adjacent is a ten-acre campus sufficiently large for demonstration work in the growing of a great variety of fruits, vegetables and live stock.

There are a number of select private schools for both sexes, much of the work and study being carried on in the open, as during the winter months there is very little rainfall and in connection with the school work, swimming, boating, golfing, tennis and all sports are indulged in to the great satisfaction of the scholars.

St. Catherine's Academy is also located in Miami and is affiliated with the Catholic University of Washington, D. C.

Without a doubt the rock bottom of the progress and prosperity of any city is its banks and banking conditions. The aggregate deposit in the six banks of Miami on March 4, 1919, with a capital stock of $625,000.00, amounted to $11,014,745, and in addition there are a number of large bonding and investment companies loaning money on gilt-edged securities.

Public utilities include the Miami Water Company, the Miami Electric Light Company, the Miami Gas Company, the Miami Traction Company, and the South Atlantic Telephone and Telegraph Company.

Hotel life in Miami is delightful, for the

hostelries have all been built with a view to the solid comfort of the guests and the home-like atmosphere prevailing is most pleasing.

It is in the hotels that the social life of the city centers during the winter season. Gay dinner parties, brilliant balls, informal teas are the order of the days and nights.

Miami has much to attract the tourist, especially during the winter months when the North is snow and icebound. Here surf-bathing is indulged in every day in the year and in addition there are sanitary pools of salt water for those who do not care for the surf. Life guards and swimming instructors are in attendance.

Over six hundred miles of rock-surface-oil-coated roads radiate in every direction from Miami, passing through groves of oranges and grapefruit. The roads are bordered with trees and flowering shrubs and many of the highways lead through the tropical jungles which are always a curiosity to the visitor.

Wonderful and climatic conditions have given Miami the distinction of being the center of aviation in southern Florida and at any time of day airplanes and hydroplanes may be seen flying above the city and bay.

The Miami Beach Golf Club, one of the finest eighteen-hole courses in the entire country, 6,088 yards, is located midway between the Atlantic Ocean and Biscayne Bay. The putting greens are of Bermuda grass, forming a contrast to many other courses in the South, and a clubhouse with accommodations for the players is one of its chief attractions. A nine-hole course is laid out nearer the city.

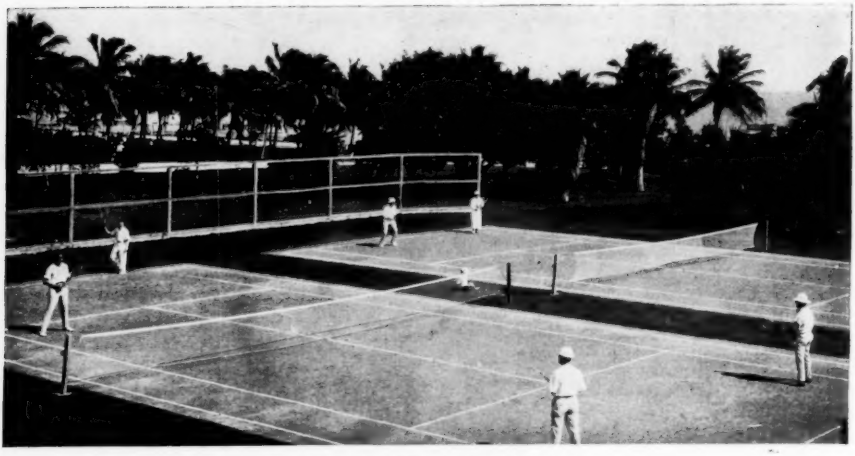
Tennis is one of the most popular all-year-round sports in this sunny Southland, and every year crack players from all over the country come to Miami where the municipal courts as well as many private courts are available for their free use.

Motor boating on Bay Biscayne is one of the sports par excellence and crafts of all sizes and descriptions may be seen on Bay Biscayne or venturing along the many keys where good fishing is to be found.

The Miami Anglers' Club, recently organized, is supplying a long-felt want. Nearly every man who winters in Miami is fond of fishing and as there are many hundreds of varieties of fish of all sizes and degrees of gameness in the bay and along the keys, the Anglers' Club is one of the busiest places and a great rendezvous for devotees of this sport.

Deer, quail and other game are to be found in abundance in the pine woods near the city and numerous parties with Seminole Indians

Avenue of Royal Palms on Biscayne Bay, Miami.



Tennis Courts, Royal Palm Hotel, Miami.

for guides are very successful in hunting for deer, wild turkeys and other game in the Everglades.

The *Miami Herald* is published seven mornings in the week and the *Miami Metropolis* every afternoon excepting Sunday. In addition the *Tropical Magazine* is published monthly, also the Miami Chamber of Commerce "Bulletin."

Miami has several parks, located in different sections of the city. Nearly all of them have free tennis courts and other improvements are planned for the near future.

The city is well paved with asphalt block, sheet asphalt or rock surfaced and oil coated.

The public library is located in the Woman's Club building.

Miami is the center and market for an agricultural empire. The city is the logical gateway for the vast resources of the Florida Everglades, which will in the course of a few years be further developed through the drainage operations into one of the greatest fruit, vegetable and stock raising sections in the United States. Dade county grapefruit is known throughout the country and sells at a premium in the Northern markets. Dade county ships one-third of all the grapefruit grown in the State of Florida and on account of its popularity, many thousands of new trees are being set out. Oranges are also receiving more attention than formerly and have been greatly in demand on account of their excellent flavor. The South Florida keys are peculiarly adapted to the cultivation of the lime and the high prices obtained for this fruit spurred up the owners of this property to greater production. The lime resents too much cultivation. The tree is planted in the primeval forest with only sufficient clearing to enable the laborers to get about. Avocadoes have within a few years become immensely popular and during the season from July to January bring almost fabulous prices in large cities in the North. With the proper care the trees begin to bear at an early age and government experts are now experimenting with pears from Guatemala that will fill out the season from January to July, thus giving an abundance of this fruit the entire year around.

South Florida, and Dade county almost exclusively, is the only portion of the United States where fine varieties of mangoes may be grown. This fact, coupled with the growing demand for this most delicious of all fruits, makes the importance of this industry obvious.

Strawberries are found in abundance in Dade county from December to May and

every year large additional acreages are planted to keep pace with the increasing demand.

All of the southern fruits grow here in abundance, but on account of their poor shipping qualities are consumed locally or made into preserves, jams and jellies.

Winter vegetables are grown in great abundance throughout the entire county. From the late fall until early spring tomatoes, beans, peppers, eggplant, etc., are shipped from Dade county by the carload and trainload to northern and western markets.

For several years Miami has lead all other cities of the South in building. In spite of this thousands of people are unable to find accommodations to their liking during the winter season, and several additional first-class hotels would be a paying investment. First-class apartment houses furnished and rented by the season are also in demand, and capitalists looking for an investment that will pay them a high rate of interest on their money, will find here something that will interest them. Building contractors have also been unable to keep pace with the demand for homes from the modest bungalow to the large house.

The retail business of Miami is generally a surprise to the newcomer, as the general appearance as well as the high-class stocks of the stores compare favorably with the cities of many times the size of Miami. There are also a large number of wholesale houses such as of groceries, produce, hardware, confectionery, stationery, paper, feed, packing-house products, fresh fish, plumbing, tobacco, coffee, etc.

Miami is looking forward to entertaining the Florida Medical Association and nothing will be left undone to make the members and their ladies enjoy a well-earned rest.

Cancer Department

"In the early treatment of cancer lies the hope of cure"

AMERICAN SOCIETY FOR THE CONTROL OF CANCER

WHAT EVERY WOMAN SHOULD KNOW ABOUT CANCER.

FRANCIS CARTER WOOD, M. D.

Some months ago the editor of the *Woman's Home Companion* indicated that that well-known magazine would be glad to publish a short, straightforward article which would give to its readers the essential information about the early recognition and prevention of the disease, especially in those forms which are common among women. Through the office of the American Society for the Control of Cancer it was arranged that such an article should be written by Dr. Francis Carter Wood, Director of Cancer Research under the George Crocker Special Research Fund of Columbia University. The article which follows was accordingly published in the *Woman's Home Companion* for February, 1919, as placed on sale in the latter part of January. The society is not necessarily committed in detail to the exact views expressed, which are those of the writer, but the general object and purpose of the paper are those for which the organization exists:

"Can't you give me some hope, Doctor?" said the pale, sad-faced woman. "The children need me here so much. My husband died some years ago, and I am all they have. I did not know that an operation had to be done early. My mother had a cancer, and when this lump came I thought I knew what it was, but I did not dare tell anyone, or come and see you, because I had heard her say that operations did no good. I saw an advertisement of a salve, and so I bought some of that and rubbed it on, but it seemed only to make things worse. Now I come to you, and all you say is, 'If you had only come in time!' I did not know that a cancer could be cut out and never come back, if it was only done soon enough. There has been so much in the newspapers lately about wonderful cures with radium. I hoped you would tell me that

I could get well without an operation, and now you say that it is probably too late!"

How often we physicians hear this sad story — of delay for months and years — of hope that something will happen—of fatalistic belief in the inheritance of cancer—of that thousand-year-old faith in an ointment well rubbed in, a faith that can be traced back to the ancient Egyptians. Why is it that there is no real public knowledge of the danger of cancer and the only means for its cure?

PHYSICIANS MUST NOT ADVERTISE.

I am afraid that the blame for much of this lack of information must be laid at the door of the physician himself. The binding code against advertising affects the honorable man—not the quack. The source of the medical knowledge of the masses today is still the charlatan and his newspaper advertisements, and it is time, indeed, that the public receive accurate information from those who know the situation.

The remarkable fall in the death rate from tuberculosis during the last few years is due to the widespread publicity given by physicians, both as individuals and as members of the Association for the Study of Tuberculosis, to this simple fact: that the disease can easily be cured, if taken in time. Similar campaigns of publicity have been carried out by the life insurance companies and the mutual benefit societies, with equal success. The cure of tuberculosis, however, is a relatively simple matter, requiring chiefly rest, good food, and fresh air; the cure of cancer, on the other hand, is unfortunately more difficult.

Cancer is a disease which, especially when it is internal, is often hard to recognize, and, moreover, it is one which requires immediate action if good results are to follow. This immediate action, in the vast majority of cases, is recourse to operation by highly trained and skilled specialists.

To some people the words "highly trained" and "skilled specialists" bring chiefly the thought of a heavy bill; but it must be remembered that in hundreds of hospitals and dispensaries throughout the land, especially in the larger cities, the advice of such specialists can be obtained on the payment of a merely nominal fee, and that at any price the services of a man who knows are less expensive in the end than those of a quack.

THE BEGINNING OF PUBLIC EDUCATION.

A beginning in public education about cancer has, indeed, been made by the American Society for the Control of Cancer, an organization formed to spread accurate and authentic knowledge concerning the disease among both physicians and the public: such, for instance, as the fact that in England cancer is the most frequent cause of death among women after the age of forty-five; that in the United States one man in fourteen and one woman in eight over forty years of age die of the disease; that, if taken at the beginning, the majority of cases of cancer are curable; that the only cure is the removal of every vestige of the disease; and that the only sure way of accomplishing this is by a surgical operation.

The efforts of this society have met with the most cordial reception. Boards of health, medical societies, insurance companies, and individual physicians have shown great interest in the work, and have taken an active part in the campaign to diffuse such knowledge of cancer as everyone should possess.

What is this knowledge? It may be summed up in a few words: Cancer is not a blood disease, but one which usually begins after middle life as a very small lump. If this lump can be found and cut out the cancer will be cured. Cancer is not inherited, nor is it contagious or due to a germ. Cancer is rarely painful, except in the last stages. While external cancer appears as an ulcer, a sore, or a lump, internal cancer can be told only by its symptoms—cancer of the stomach by dyspepsia, bloating, vomiting of food and blood; cancer of the bowels by colic, bloating, and passing of blood; cancer of the womb by bleeding at unexpected times or after the change of life; cancer of the kidney by blood in the urine.

If everyone who showed any of these symptoms immediately consulted a physician, especially one who has had a hospital train-

ing, and knows how to make the modern laboratory tests and to use the X-ray machine in diagnosis many lives would be saved.

Distrust the physician who does not have a microscopic examination made of any lump of the nature of which he cannot be certain. Most early cancers can be diagnosed only in this way. If one waits for all the symptoms to appear, it is often too late to save life.

While we do not know the cause of cancer despite all the investigations which have been made by scientific men, yet we do know a great deal about how it occurs and what is apt to precede it, and our lack of knowledge as to the cause does not prevent our being able to cure it. Many diseases of which we do not as yet know the real cause are nevertheless curable. So we find that cancer frequently begins in moles or warts which are irritated or rubbed by the clothing or made to bleed or kept sore by repeated injury of any sort. Such warts and moles are perfectly harmless at first and become dangerous only after they have been irritated for a long time, especially if the person is of the cancer age—that is, above forty. It is wise, therefore, to have such moles removed if they are in a situation where they are liable to be rubbed or injured.

BEGINNING OF CANCER.

Physicians have noted, also, that cancer may develop in a scar of an old burn, or in places where a chronic ulcer forms, as on the lip or tongue or leg, and it is important to see that such injuries are healed as soon as possible. Ulcers on the tongue or cheek are frequently caused by the scratching of a poor filling or by the sharp point of a decayed tooth, and a dentist should be consulted if a sore spot in the mouth does not heal in a few days.

The first beginnings of an internal cancer are much more difficult to discover, because these tumors when they start are found only by accident. But it has been found that they very often begin in some slight inflammation or ulceration. Ulcer of the stomach, which is a common starting point for cancer, is a good example; while such ulcers are frequent in women, they can be easily cured by suitable treatment if they are taken at an early stage. If a cure can not be obtained by dieting, it is now considered wise to have the ulcer removed. Cancers of the lower bowel, also, are not infrequently preceded by some sort of chronic inflammation or ulceration, and persons suffering from chronic dysentery, bleeding piles or ulceration of the bowel should consult a physician.

Cancer of the breast in women frequently follows chronic inflammation, and is not caused by a blow, as is so frequently thought. Any woman who notices a lump in her breast should at once consult a physician.

THE ONE AND ONLY CURE.

Cancer can not be cured by ointments, salves or pastes. These preparations are prescribed only by quacks, a fact which should be known to everyone. Caustics will cure some small cancers of the face, but no other kind. Do not rely on radium or X-ray; they certainly and permanently cure only the small face cancers, and although many deep cancers may be greatly improved by the use of radium or X-ray, in most cases this change is only temporary.

What radium and X-ray can do, when we know better how to use them, is, of course, not settled, but what we do know now is that removal by operation will cure many more cancers than will treatment with radium or X-rays.

The only way in which the ravages of cancer can be checked is by early diagnosis. This early diagnosis can be made only when the patient consults a physician; no physician can possibly seek out and examine people without their requesting it. The people must come to him. Many people say that they do not want doctors examining them, though, curiously enough, they make no objection to the most thorough medical examination if it is for life insurance. Why should they object if the examination is to preserve their own lives, and not merely to afford means of saving money for the lives of others. They think nothing of going to a dentist once a year to have their teeth examined. Why should they

not go and have their bodies examined to see if any serious disease exists, especially after they have reached the cancer age.

THE ONCE-A-YEAR EXAMINATION.

In the larger cities a beginning has been made in this direction, particularly by the life insurance companies, which offer to their clients the option of an examination, performed at stated intervals, by reputable physicians not connected with the company.

Unfortunately, this opportunity does not yet exist outside of the cities, but there are everywhere plenty of physicians who are perfectly competent to recognize early cancer, and there are many laboratories where specimens can be examined free if the physician himself has not a sufficient equipment.

Why, therefore, should not every person of the cancer age go to her physician once a year, even if she has no serious symptoms, and learn whether a cancer is present or not. In the vast majority of cases an answer can be given. If the cancer is found early, it is likely to be so small that a competent surgeon will be able to remove it, with every hope not only that life will be prolonged but that the tumor will never return. The results of the best modern surgery in cancer are quite extraordinary. Cancer of the lip in its early stages can be cured in ninety per cent of the cases; cancer of the breast, if taken early enough, certainly in half of the cases, and cancer of the womb in a quarter of the cases. No other means of treatment offers the same amount of hope. To delay means certain death, for cancer does not cure itself.—*Campaign Notes American Society for the Control of Cancer.*

PROPAGANDA FOR REFORM.

DEPILAGIENE. — The A. M. A. Chemical Laboratory reports that "Franco-American Hygienic Depilagiene," a hair remover, essentially is a mixture of barium sulphate, barium sulphid, sulphur and starch. The amount of barium sulphid was found to be 22.6 per cent; this is equivalent to about 45 per cent of commercial barium sulphid. Depilagiene has no claim to originality, as practically all chemical hair removers are composed of some form of sulphid. Naturally, the preparation is likely to cause more or less irritation of the skin (*Jour. A. M. A.*, March 8, 1919, p. 746).

HAVENS' WONDERFUL DISCOVERY. — The Council on Pharmacy and Chemistry reports that E. C. Havens, Sioux Falls, S. D., requested consideration of a remedy which he claims to have discovered for the cure of influenza. According to the label on a specimen, "This remedy is good for Coughs, Colds, Lung Diseases, LaGrippe, Influenza, Rheumatism; good for Pains, Cramps, Backache, Lumbago, Neuralgia; for severe pains soak your feet in hot water for three nights, add three tablespoons of baking soda in water and apply Anti-Flue Medicine to the affected parts." The "discovery" was stated to contain oil of wintergreen, oil of sassafras, oil of black pepper, spirit of camphor, spirit of turpentine, spirit of chloroform, tincture of arnica and alcohol, and was called Havens' Rheumatic Remedy before its supposed effect on "flu" was "discovered." The Council finds that Havens' Wonderful Discovery is an unscientific, irrational mixture, marketed under therapeutic claims which are unwarranted and without foundation (*Jour. A. M. A.*, March 22, 1919, p. 883).

MALT PREPARATION IN INFANT FEEDING. —Malt preparations have enjoyed popularity for some time in the feeding of infants. A familiar mixture is the so-called malt soup, the use of which was modified by Keller to include potassium carbonate. The assimilibility of maltose has been highly lauded, but the advantage over other carbohydrates has not been definitely proved. Maltose has been vaguely stated to be indicated in the constipation of infants and the retraction of calcium facilitated by the use of Keller's formula. However, in experiments on animals it was not found that administration of a base like sodium carbonate produced any effect on the balance of calcium. It has also been reported that in a normal infant the addition of alkali to milk produced an unfavorable effect on calcium retention. Without addition of

alkali, malt extract was found to act beneficially on calcium storage, but this is probably not due to the maltose. If malt soup has a favorable effect on calcium metabolism, it is not due to the alkali originally present or added to it. There is no reason at present to attribute the seemingly substantiated benefit from malt preparations on calcium storage to the maltose (*Jour. A. M. A.*, March 1, 1919, p. 656).

Misbranded Nostrums. — A "Notice of Judgment" has been issued declaring the following nostrums misbranded: Chase's "Blood and Nerve Tablets," "Liver Tablets," and "Kidney Tablets"; XXX Tonic Pills; Egiuterro; Uicure; Sweet Rest for Children; Beaver Drops Comp.; Blood Kleen; Heart and Nerve Regulator; Kidneyleine; Eye Powder; Tanrue Herbs and Pills, and 5 Herbs (*Jour. A. M. A.*, March 22, 1919, p. 883).

Misbranded Nostrums.—The following nostrums were declared misbranded under the Federal Food and Drugs Act because of the false, fraudulent or misleading claims made for them: Alkavis; Sulferro-Sol; Gonorrhea and Gleet 3 Day Cure; Old Indian Fever Tonic; Pain-I-Cure; Walker's Dead Shot Colic Cure (*Jour. A. M. A.*, March 1, 1919, p. 670).

Nature's Remedy Tablets.—A. H. Clark, of the A. M. A. Chemical Laboratory, reports that "Nature's Remedy" is claimed to contain ten ingredients; that the manufacturers declare seven of these — burdock, juniper, sarsaparilla, mandrake, rhubarb, dandelion and prickly ash; and that the manufacturers state they are "more proud" of the other three, but refrain from naming them for fear of imitators. Clark's analysis, supplemented by a microscopic examination by E. N. Gathercoal at the University of Illinois School of Pharmacy, indicated that the unnamed drugs are aloes (or a preparation of aloes), cascara bark and belladonna root. The microscopist stated that rhubarb, as well as all the other named drugs, if present at all are there in such small quantities that no evidence of their presence was seen. As a result of the examination and a consideration of their powerful cathartic action, it is believed that Nature's Remedy is, essentially, aloes or aloin, cascara, and belladonna with, probably, resin of podophyllin (instead of mandrake)—a common cathartic mixture (*Jour. A. M. A.*, March 15, 1919, p. 815).

Organo Tablets and Orchis Extract. —The Organo Product Co., Chicago, sells Organo Tablets as a cure for "lost vitality.' The Packers Product Co. sold Orchis Extract until it was put out of business by the government in 1918 by the issuance of a fraud order. Even a superficial comparison of the circular letters and booklets used in exploiting Organo Tablets shows a close connection between this humbug and the government declared fraud—Orchis Extract. Has Orchis Extract of the Packers Product Co. become Organo Tablets of the Organo Product Co.? (*Jour. A. M. A.*, March 8, 1919, p. 746.)

Saccharin—After the War.—Having satisfied a need during the sugar shortage, the manufacturers of saccharin appear not to be content to turn their talents and plants to better uses, but suggest that the great commercial sacrifices made in setting their works into operation to produce saccharin should be rewarded by permission to continue the traffic under post-war conditions. The referee board to which the saccharin question was referred in this country has by no means given a clean bill of health to the chemical, and the people need to be protected from the danger, or at least the deception, of a substitute for sugar which is in no sense a true food (*Jour. A. M. A.*, March 8, 1919, p. 729).

The Victory Over Rabies. — Amid the victories on the European battlefield, we may pause to contemplate man's conquest of rabies. During the year 1916, 1,008 persons in the district of Lyons received the antirabic treatment. A single death in this list places the mortality at 0.099 per cent. Since 1900, more than 9,000 persons have received antirabic inoculations, with a total of nine deaths, or 0.09 per cent (*Jour. A. M. A.*, March 15, 1919, p. 800).

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(To be selected).

Next Meeting—Miami—May 20, 21, 22, 1919

PRELIMINARY PROGRAM AND ARRANGEMENTS FOR THE MIAMI MEETING.

The preliminary program and arrangements of the forty-sixth annual meeting of the Florida Medical Association, to be held at Miami on May 20th, 21st and 22d, is published elsewhere in this issue of THE JOURNAL. Attention is especially invited to the change in dates of the meeting. It was originally intended that the meeting take place on Wednesday, Thursday and Friday, the 21st, 22d and 23d, but the Executive Committee has lately deemed it advisable to move the date up one day so as to allow all members from a distance time to reach home by Saturday morning. The program, while not as large as some previous ones, will prove to be one of interest. Among the essayists who appear on the program, having been released from military service during the last few weeks, may be mentioned Doctors H. D. Snow, Hiram Byrd, Gerry R. Holden, George Lassman, F. J. Waas, J. Knox Simpson and Graham E. Henson. Past President Ralph Greene, now on duty at the United States General Hospital, Fort Sam Houston, Texas, appears on the program and a special request has been made by the officers of the Association to Surgeon General Ireland requesting that this officer be given the necessary authority to attend the meeting.

A feature of the meeting this year, and an innovation, is the devoting of the entire third day of the session to entertainment provided by the Dade County Medical Society. This organization has provided for a full day of entertainment; the profession has earned a respite from the arduous professional duties of the past many months, and prediction is made that a grand and glorious day will be spent by all those in attendance.

CHILD WELFARE AND DISEASE UNDER WAR-TIME FOOD CONDITIONS IN CENTRAL EUROPE.

Reports which are beginning to reach us from central Europe bring confirmation in

new ways of the seriousness of the food situation that has confronted the belligerent nations there in the past two or three years. Although an unusually large incidence of epidemics may be interpreted as representing the consequence of widespread malnutrition which offers more ready entrance to the invasion of infections, such a conclusion is by no means the inevitable one. Thus, the outbreak of influenza in many parts of the world can scarcely be adduced as proof of the existence of inadequate food supplies where the malady occurs. But, on the other hand, whenever deficiency diseases come into unusual prominence it may be taken as almost axiomatic that food conditions are somewhat disturbed. The accounts of the appearance of "war edema" have focused attention on dietary difficulties referable to war-time conditions. And more recently the descriptions of an unexpected prevalence of infantile scorbutus[1] accentuate the long suspected seriousness of the food situation in the defeated countries.

Even the European pediatricians have at length accepted the inclusion of infantile scurvy in the category of nutritive disorders of the deficiency type. The failure to identify Barlow's disease with what is termed scorbutus in this country appears to be accounted for in large degree by the comparative infrequency of well-defined cases. Writing from von Pirquet's clinic for children in Vienna, Tobler remarks that scorbutus has heretofore played only an insignificant part in the pathology of childhood within the ages from 2 to 15. In Gerhardt's "Handbuch für Kinderheilkunde," published in 1878, scurvy in childhood was stated to have practically disappeared. Today, however, it is possible to find reports of literally hundreds of cases of the disease. It is not confined to unhygienic surroundings where "bad air," lack of sunlight, humidity and other once supposedly formidable dangers lurk. Even in the children's homes attached to the great universities of Europe, scorbutus has made its appearance. Underfeeding is not a prime factor, if, indeed, it is a contributory one. Tobler reports that out of sixteen children living at one time in the presumably excellent environment of the solarium of the children's clinic in Vienna, twelve developed scurvy. Hence he dismissed lack of care or unsalubrious climate as an etiologic factor, and refers the genesis of the disease to the protracted exclusive use of foods which have been subjected to certain chemical and physical processes incident to their preparation for the diet. We are told that in the winter of 1917-1918, fresh vegetables and potatoes were no longer available for the children. In one institution only sixteen liters of milk were procurable for a personnel of about 500. In 200 carefully studied cases of scurvy, Tobler identified the incidence of the disease with the lack of foods which had not been altered in some way by heat. This corresponds with the numerous reports of the destruction of the antiscorbutic potency of natural foods by heat, as has been pointed out frequently of late in *The Journal*.[2]

Reports from Prague are also distressing.[3] The statistics of the average daily gains in weight of children of a certain group in one of the orphanages verify this. From 1913 to 1917 the figure, in grams per day, decreased thus each year: 20.6, 20.5, 17.2, 14.1 and 10.8. The mortality increased from 4 per cent in 1913 to 15 per cent in 1917. Various factors have contributed to this unfortunate outcome. Owing to the conditions for which the war was responsible, breast feeding was no longer possible to the same extent as formerly. The nursing women were nourished less well than in the times preceding the war. The failure to secure foster mothers was coincident with an enforced decrease in the supply of cow's milk. The quality of the latter has steadily decreased; and such useful by-products of the milk industry as buttermilk are not available at all.

It is not surprising if, under such trying circumstances, infantile scurvy has conspicuously joined the ranks of other diseases associated with nutrition. Epstein, of the children's clinic in Prague, has given an account of the difficulties confronting thera-

peutic efforts. The much desired "raw" milk was often of doubtful "rawness," as the high price of milk had taught dairymen to prevent by heat sterilization the loss of even the slightest portion. Oranges, long recommended by English and American pediatricians as antiscorbutics, disappeared from the markets early in the war. Other fruits and even most green vegetables were difficult to obtain and were usually so expensive as to make them almost prohibitive among certain groups of the population. Hence we can understand the earnest appeal of the pediatricians of the afflicted territories for the speedy renewal of the milk supply and their protest against the production of high-priced butter at the expense of infant welfare. In an almost frantic appeal for relief from the impending disaster to European childhood, Epstein has called for action instead of words on the part of the authorities responsible for the public health. We may do well to understand the true import of such warnings so that the nutritive welfare of our own child population shall never be knowingly neglected.—*Jour. A. M. A.*

1. Tobler, W.: Das Skorbut im Kindesalter, Ztschr. f. Kinderh. 18; 63, 1918. Epstein, A.: Ueber eine auffallige Haufung der Barlow'schen Krankheit in den Kriegsjahren 1917-1918, Jahrb. f. Kinderh. 88: 237, 1918.
2. Further Facts Regarding Antiscorbutics, editorial, J. A. M. A. 72: 728 (March 8) 1919.
3. Pollak, L.: Ueber das Verhalten der Sauglinge in den Kriegsjahren, Wien. med. Wchnschr., No. 23, 1918.

ACUTE INFECTIOUS POLYNEURITIS—A NEW DISEASE.

During the war there was observed among British troops a form of polyneuritis of a peculiar character which has been studied with noteworthy results by Bradford, Bashford and Wilson.[1] The clinical manifestations were studied by Bradford in thirty cases.[2] Usually there was first a mild general febrile illness before paralysis appeared, but occasionally paralysis was the first symptom observed. As the primary illness was mild, the symptoms being fever, headache, pain in the back, perhaps vomiting, and sometimes sore throat, no importance as a rule was ascribed to it; at times, however, the condition seemed serious enough to suggest perhaps the possibility of epidemic meningitis. Usually the patient appeared to recover fully in a few days, and then there ensued a variable period of latency, in one case as long as five weeks, before the paralysis which seems to be peculiar to the disease came on. During this interval some of the patients felt well enough for severe physical exertion without distress.

The main characteristics of the paralytic stage were sudden, widespread paralysis, especially, but not exclusively, of the large muscles of the proximal segments of the limbs and trunk; the face also was almost always involved, and generally on both sides; individual muscles or groups of muscles were not picked out, the limbs and trunk being affected as a whole. Though symmetrical, the palsy, which was progressive and sometimes distinctly ascending, was not always equal on the two sides. Atrophy and contractures did not develop. Usually the paralysis was accompanied with pain, numbness, tingling, and relative rather than absolute sensory loss. In declared cases there was loss of tendon reflexes; the sphincters were not profoundly involved. A striking feature was the rapidity with which urgent symptoms and even death came on in patients who seemed to be doing well. In this series of thirty cases death occurred in eight, sometimes rather suddenly, and in all except in one case before the eleventh day of the palsy. In the patients that recovered, the paralysis, first progressive, became stationary and then it would begin slowly to improve.

The results of the work by Bashford on the transmission of the disease to monkeys, and by Wilson on the virus, are remarkable indeed. The main features of the disease were reproduced in monkeys by the subdural injections of suspensions of the spinal cord of three cases after preservation in 50 per cent glycerol for from twenty-five days to seven months; also by inoculation of cord material from monkey to monkey, and more-

over by injection of pure cultures of an organism isolated from the central nervous system. The experimental disease developed after an incubation period of from five to six weeks, but without any recognized and definite preliminary febrile stage, the main symptoms being weakness and paralysis of the limbs, apparently tending to recovery. In anærobic tissue cultures of nervous tissues from fatal cases and from monkeys, immersed in 50 per cent glycerol for some days to rid them of gross bacterial contaminations, Wilson obtained growths of a minute, pleomorphic organism, which was difficult to stain and which died out after a few subcultures. Apparently the organism was widely distributed in the nervous system because it rarely happened that a culture failed to give specific growths. If confirmed by subsequent investigators, these results will be highly creditable because of the great difficulties and the many chances of error that attend practically every step in the cultural technic employed in this work.

As regards the gross and microscopic changes in the nervous system, suffice it to say that meningeal congestion, edema, and minute hemorrhages and apparent inequalities in the gray matter of either side of the cord were noted, and that the evidences of acute neuritis and of degeneration of nerve cells with more or less diffuse cellular infiltration in the central nervous system were so definite as to lead the authors to conclude that it concerned a diffuse affection of the nervous system involving the cord, the spinal ganglions and the peripheral nerves, with, however, "that slight incidence on the cortex." The lesions in the central nervous system to have been more diffuse than in epidemic poliomyelitis; intense focal changes in the anterior horns, like those seen in the latter disease, seem not to have been observed.

Whatever the final outcome of etiologic and anatomic investigations, there seems little doubt that the English observers have pointed out the existence of a hitherto practically unrecognized disease. The new disease differs from ordinary neuritis in many respects, notably the constant bilateral paralysis of the face, trunk, and proximal segments of the limbs, progressive and at times at least ascending, with involvement of the central nervous system. It would seem to be distinct from epidemic poliomyelitis because there is no muscular atrophy or tendency to contracture, and because the lesions are not identical. Bradford suggests that the virus of the new disease may be a member of the same class as that of epidemic poliomyelitis; possibly epidemic or lethargic encephalitis (nona) is caused by allied organisms. Here are many problems for future work. In the meantime, physicians should bear in mind the probability that there are distinct infectious diseases of the nervous system which may be escaping detection because of a general similarity in their clinical manifestations to establish entities. — *Jour. A. M. A.*

1. Bradford, J. R.; Bashford, E E., and Wilson, J. A.: Acute Infective Polyneuritis, Quart. Jour. Med. 12: 88, 1919.
2. Gordon Holmes (Brit. M. J. 8: 37 [July 14] 1917) is said to have described similar cases.

JOINT INFLUENZA COMMITTEE.

A Joint Influenza Committee has just been created to study the epidemic and to make comparable, so far as possible, the influenza data gathered by the Government departments. The members of this committee, as designated by the Surgeon General of the Army, the Surgeon General of the Navy, the Surgeon General of the Public Health Service, and the Director of the Census, are: Dr. William H. Davis, chairman, and Mr. C. S. Sloane, representing the Bureau of the Census; Dr. Wade H. Frost and Mr. Edgar Sydenstricker, of the Public Health Service; Colonel D. C. Howard, Colonel F. F. Russell, and Lieutenant Colonel A. G. Love, United States Army; Lieutenant Commander J. R. Phelps and Surgeon Carroll Fox, United States Navy.

Hold fast to that which is good. Keep your Liberty Bonds.

PRELIMINARY PROGRAM

Forty-Sixth Annual Meeting of the Florida Medical Association

To be held at Miami May 20, 21 and 22, 1919.

All meetings of the General Association, of the House of Delegates and those of the Scientific Assembly will be held at the Biscayne Yacht Club.

MAY 20TH, 10 A. M.

Call to order by Dr. H. L. Babcock, *Chairman, Committee on Arrangements.*
Opening Prayer, Rev. W. W. Farris.
Address of Welcome, in behalf of the city of Miami, Hon. J. W. Watson, *introduced by Dr. H. L. Babcock, Chairman, Committee on Arrangements.*
Address of Welcome, in behalf of the Dade County Medical Society, E. K. Jaudon, M. D., *President of the Dade County Medical Society.*
Response to Addresses of Welcome, F. J. Walter, M. D., *President, The Florida Medical Association, Daytona.*
Report of the Executive Committee.
Report of the Secretary.
Report of the Treasurer.
Report of the Editor.
Report of the Councillors.
Organization of the House of Delegates.
Meeting of the Florida East Coast Surgeons (for the purpose of organization).
Meeting of the Railroad Surgeons of Florida (for the purpose of organization).

2 P. M.—Scientific Assembly.

Wm. E. Ross, M. D., Chairman.

Public Health Activities, O. H. Cox, M. D., Passed Assistant Surgeon, United States Public Health Service.
Eradication of Mosquitoes in Key West, Surgeon, United States Navy.
Venereal Disease Control Work in Florida Under the Supervision of the United States Public Health Service and the State Board of Health Jointly, H. D. Snow, M. D., Acting Assistant Surgeon, United States Public Health Service.
The Antiquity of the Tubercle Bacillus: Some Biological Considerations, Hiram Byrd, M. D.
Syphilis: The Public Understanding and Misunderstanding of It, H. E. Whitford, M. D.
The Laboratory: Also the Use and Abuse of Biologics, B. L. Arms, M. D.
Vital Statistics, S. G. Thompson, M. D., D. P. H.
Cremation, or Disposal of the Dead Human Body, G. C. Kingsbury, M. D.

4.30 P. M.

Meeting of the House of Delegates, The President in the Chair.

8.30 P. M.

General Meeting of the Association.
Annual Address of the President: Organized Medicine, F. J. Walter, M. D.
Pathological Processes of the Gastro-Intestinal Tract: With Lantern Slide Demonstration, Marvin Smith, M. D.

MAY 21ST, 9 A. M.

Scientific Assembly.

Wm. E. Ross, M. D., Chairman.

The Medical and Surgical Treatment of Cataract, W. Herbert Adams, M. D.
The Diagnosis of Extra-Uterine Pregnancy, Gerry R. Holden, M. D.
Contracted Pelvis and Pelvimetry, George A. Lassman, M. D.
Surgical Complications in Obstetrics, F. J. Waas, M. D.
Neuro-Psychiatry and the War, Ralph Greene, M. D.
A Few Observations on Influenza, J. G. DuPuis, M. D.
Relation of the Trained Nurse to the Profession and to the Public, R. R. Kime, M. D.

12 O'CLOCK.

Election of Officers.

2 P. M.—Scientific Assembly.

Wm. E. Ross, M. D., Chairman.

Roentgen Diagnosis in Its Broader Applications, L. W. Cunningham, M. D.
Hydro-Nephrosis, J. Knox Simpson, M. D.
The Wassermann Test as a Control of the Treatment of Syphilis, Graham E. Henson, M. D.
Atypical Syphiloderms, J. L. Kirby-Smith, M. D.
Chronic Dacrocystitis, A. K. Wilson, M. D.
Seminal Vesiculitis, Edgar Peters, M. D.
The Plague! Why? D. B. Harvey, M. D.

MAY 22D, 10 A. M.

An innovation is introduced at the meeting of the Association this year—the third day being devoted entirely to entertainment provided by the Dade County Medical Society. The members and visiting ladies will meet at the Hotel Urmey at 10 o'clock for an auto ride through Brickell hammock, Deering Place, Cocoanut Grove, Brights' farm, Dr. DuPuis' White Belt Dairy, thence to Miami Beach Casino for a dip in the surf (everybody come on in; the water's fine). After the dip, a barbacue and buffet luncheon will be indulged in.

Association Headquarters, Hotel Urmey.

EXHIBITION OF THE MEDICAL ACTIVITIES OF THE WAR.

Army Medical Museum, Seventh and B Streets, S.W., Washington, D. C.

The object of this exhibition is to show the activities of the Medical Department during the War, and to illustrate certain of the developments attained in medicine, surgery, and sanitation during this period.

Exhibit 1. Proposed medical center at the Walter Reed Hospital, Takoma Park, D. C. It is planned at this center to group all the medical activities of the Government in Washington, now located in separate sections of the city, which will mean the centralization of the Museum, Library and Army Medical School. The exhibit shows the

architect's plan and sketches of the medical center; photographs of present quarters, and an oil painting of the Military Hospital at Fort McDowell, California.

Exhibit 2. X-Ray Units. This exhibit consists of the U. S. Army portable X-ray outfit complete and a bedside X-ray unit. The portable outfit comprises a ¾ K. W. Delco gas electric set with special winding supplying an alternating current; an instrument case containing a 50,000-volt transformer, together with Coolidge filament transformer and control; and the Army X-ray table with litter tops, trochoscope and fluoroscopic screen. The entire outfit can be quickly set up or knocked down for shipment. Having its own power plant, it is independent of electric power lines and can be used in the field where no power is available. Coolidge tubes of the special radiator type are employed and the outfit while operating on rather low power is yet capable of doing most excellent work, both in the making of the so-called X-ray pictures and in fluoroscopic work. A chest of localizing instruments is provided comprising six different methods of localizing foreign bodies, bullets, fragments of shell, shrapnel, etc., in the body of the patient so that the surgeon may be informed as to the exact location of the projectile. Provision is also made for guiding the surgeon, if necessary, during the operation itself, to the seat of the foreign body. The bedside X-ray unit is a very portable piece of apparatus which can be moved freely about a hospital, and by means of which it is possible to examine patients without removing them from their beds. Patients with pneumonia, or other diseases, who are too ill to be moved to the X-ray laboratory proper may thus be successfully examined. Fractures may be fluoroscoped or plated with the patient in bed, and the apparatus for retention in place, by the employment of this small apparatus. These units were used with a high degree of success in the late war. The portable outfit when mounted in a modified army ambulance body forms the U. S. Army X-ray Camion.

Exhibit 3. Section on Infectious Diseases and Laboratories. The war has shown as never before the value of science in the prevention of disease. The principles employed are based on statistical and laboratory studies. These, together with certain other investigations, constitute the subject of epidemiology. The exhibit shows the principles and methods adopted by the army in dealing with the infections which in former wars have proved to be formidable allies of the enemy. An explanation of the three elements of the campaign against disease, the defensive, the offensive, and the administrative, occupy about one-half of the exhibit. The other half is taken up largely with graphic representations of the results. The graphs are a special feature of the exhibit, showing in a remarkably clear manner a great many facts which would otherwise be lost in a maze of statistical data—for example, the gradual reduction in the amount of sickness in the army for the last twenty-three years is shown by a graceful spiral. The annual occurrence of influenza is represented by a star-shaped diagram. How the army conquered typhoid and malaria and the fight which it has waged against venereal disease are illustrated in a striking manner. The way in which the Surgeon General keeps his finger on the health pulse of the army and detects the first signs of approaching sickness are shown also.

Exhibit 4. General Surgery. Photographs are shown of the removal from the field of battle and transportation to Base Hospitals of wounded soldiers in France. Another set of photographs presents views of a typical camp hospital and a Sanitary Corps man with full field equipment on his back. A model is on view showing the base hospital at Camp Sherman, Ohio, which is considered the best type developed. Another model shows a type of hospital used during the Civil War. The buildings comprising a Civil War hospital were grouped in a circle, while in the present model the buildings are grouped in the order of streets. The latter model is considered more sanitary, as it affords more air space and others sanitary

features for the patients. In the late war, in hospital construction, special emphasis was laid on sanitary arrangements, light and open air spaces for the wards. Another feature of this exhibit is a case of wax models of mustard gas burns, showing the effect of these burns on the hands and other parts of the body, and depicting the terrible suffering inflicted on our men in France by mustard gas attacks of the Germans. Still another feature of this exhibit is the Carrel-Dakin outfit, which is an open treatment of wounds by constant irrigation, and very successfully employed in the late war. Models in wax will be shown to demonstrate the progress of an infected wound with the use of Dakin's solution. Present and Civil War surgical instruments showing the progress made in surgical appliances complete this exhibit. So soon as completed, there will be shown reproduction in wax of Maxillo-facial injuries, with the apparatus used in the treatment of each case, supplemented by a model of the completed case.

Exhibit 5. Orthopedic Surgery. This consists of a series of charts and photographs showing the handling of wounded soldiers in France and the reconstruction of wounded patients at army hospitals in this country and abroad. Photographs included are of special splints and other appliances used in the treatment of wounded in France. A series of photographs illustrate the use of splints from the time the soldier is wounded on the battlefield until he is cured. In the late war, surgeons with our troops overseas took these splints right into the field of battle and applied them to the wounded where they fell. A feature of this exhibit is the snowshoe trench litter with a figure lying on it, and a standard U. S. Army Litter with a figure showing the method of application of the splints in the trenches. A series of latest models of artificial limbs also forms part of this exhibit. In the late war, the hospital corps men took the litters over the top, carrying two splints with bandage, wire gauze and a catch to put around the foot and applied the splints to the wounded right in No-Man's land when the soldiers were picked up. This prevented shock and laceration of the nerves and the soft parts by the ends of the fractured bones. Another figure on exhibition illustrates the use of the Balkan frame and splints in the treatment of bad fractures by traction in bed. Photographs and drawings of new types of splints and appliances in the treatment of wounded are also shown.

Exhibit 6. Reconstruction. The Division of Physical Reconstruction furnishes physical and educational service. The Division aims, through exercises, both passive and active, mental as well as physical, to hasten a man's recovery and enable him to reach more complete restoration. The exhibit aims to show the parts of the service that can be depicted in pictures, or represented by fabricated articles. Naturally much of the best part of the work of the Division can not be shown unless it were possible to make an exhibit of patients and operations. Very little can be shown of the very important work of the Physio-Therapy Department. This department has skilled operators giving hydro, electro and thermo treatments. Its corps of trained operators massage stiffened joints, shrunken muscles, and give passive exercises which result in restoring the first feeble motions, and later, as voluntary exercises and motion become possible, the education department in the Division of Physical Reconstruction continues the treatment. In examining the exhibit, the visitor, then, should bear in mind that much valuable service has preceded the work exhibited. After the passive treatment comes the occupational work in the wards. Much of this is done while the patient is still in bed. This work is supervised by women known as Reconstruction Aides in Occupational Therapy. They come as a blessing to men racked with pain, perhaps tired of the monotony of staring at the ceiling and thinking only of troubles past and troubles to come. They propose something to do. The exhibit shows much of the work done by the men at this stage in their recovery. Some of it appears to the visitor as being unusual work for men

and soldiers. It even looks like women's work. Beautiful knitted bags, knotted cord work, tooled leather, are some of the popular lines. Bead necklaces, woven belts and colonial mats appear in this same list. If one follows the progress of a soldier through the exhibit, it is evident, however, the occupation becomes more masculine, more purposeful and more truly vocational. The tooled leather pocket books and tobacco pouches lead out into shoe repair, perhaps, and here we find some splendid samples of fine shoe repairing. One pair of shoes, in particular, attracts attention. The right one looks almost like a new shoe, but tied up securely to it is its worn left mate, the worn one showing from what lowly condition the right one had been retrieved. Many men have availed themselves of the opportunity to learn cobbling. Up to January 31st, 562 had been reported as studying this trade. Probably not far from a thousand have received very affective instruction in cobbling. The toy making will attract the attention of everyone. This is found to be a task inspiring the interest and breaking through the lethargy which follows the shock of battle and hospital operations. Toy-making helps the men to take a renewed interest in some purposeful activity. The tin toys are made from all sorts of articles reclaimed from the junk pile. The automobiles, the aeroplanes, the fire engines are marvels of ingenuity and exactness. If such activity restores a man's finger action, teaches him something of soldering, leads him out into mechanical trades and, best of all, inspires him with renewed hope and a knowledge that he can come back, it will prove to have been very profitable employment. One case contains some very attractive jewelry pieces. This attractive employment has been the means of helping many a man to retrain the hand that has lost its cunning, or has been the means of teaching a new hand to acquire dexterity. On the wall are photographs showing the larger shops and groups of men engaged in automobile repair, in carpentry, in machine-shop work, in typewriting and telegraphy. It is estimated that 2,500 men have been given instruction in typewriting, 4,000 men in agriculture, 1,000 in telegraphy, while 4,000 have received curative instruction and exercise in wood-working. A very popular line, of which some fine examples are exhibited, is that of basket making. This is one of the occupations which seems to lie intermediate between bed occupations and those of the vocational shops. For patients able to get about in the ward, it affords a splendid diversion and fine exercise for masculine fingers. It probably presents some possibility of vocational value, but this is so small that its main value lies in its immediate curative effects. Probably 4,000 men have received instructions in basketry courses. The exhibition contains exhibits of picture-framing, novelty box-making, brush-making, chair-caning, wood-carving, rug-making, hammock-making and modeling. Each has found its own devotees among the instructors and patients, and each has helped to pass the tedious hours in profitable employment. Picture to yourself the result of these articles wrought so laboriously. Back of each is a human life, a personality, restored by happy occupation from discouragement and despondency, to hope and cheerfulness. Starting with anything, however trivial, which interests, the reconstruction service aims to lead a man into more and more purposeful activity, until earnest effort is made to secure real training in civil employment. If these toys, trinkets, pictures and mats shall have awakened a man and pointed to him the way to overcome his disabilities, they will have served a vastly important service. Upon one of the walls is a panel of machine tools, the production of a machine shop. This is an especially fine line of endeavor. Though a man's stay in the hospital may be short, he will still have time to make one or two small machine tools—perhaps a pair of calipers, a clamp or set of chisels. He has the pleasure of making something for himself which will be not only useful, but a souvenir of his hospital experiences. While making this, he gets the needed exercise, he forgets the ever present

disabilities, and, at the same time, he receives real training and instruction in a man's occupation. To make even a small tool often requires a knowledge of most of the major operations in a machine shop. Fifty thousand soldiers have been served by the Division of Physical Reconstruction in Army Hospitals. Hundreds have been taught to read and write, thousands have received instruction in English, in typewriting, in agriculture, in drafting, and in telegraphy. Forty-eight hospitals are now giving this service. Before the work is finished over a hundred thousand men will have been touched by the educational and physical service represented by this pleasing exhibit.

Exhibit 7. Section of Neuro-psychiatry. The exhibit consists of photographs, charts and graphic presentations outlining briefly the activities of the Section of Neuro-psychiatry in the Medical Department of the Army. A chart of organization shows the relation between the office of the Surgeon General and the camps and hospitals from a neuro-psychiatric standpoint. From the chart may be obtained an idea as to the possible progress of a patient from the time he is first seen by a neuro-psychiatrist in the camp or hospital until he is discharged as cured, returned to his home, continued under care as a chronic patient or otherwise disposed of. A plan of a model neuro-psychiatric ward such as has been constructed as a part of Army Hospitals and photographs of the same from various parts of the United States, together with photographs of therapeutic equipment and facilities for outdoor and indoor occupation, illustrate the high standard of treatment of nervous and mental patients in the Army Hospitals. A map has been prepared showing the location of the Army Hospitals in which nervous and mental patients are received and treated. On another map the striking tendency of thyroid diseases to occur in certain well-defined localities is illustrated. The attention is especially directed to the chart showing the success with which 100 cases of nervous diseases were treated at the front in France, most of these patients being returned to duty in a short time, only one having been sent back to the United States. In connection with this chart, the photograph of a case of so-called "shell shock" should be studied. The patient, persistently holding his back in an awkward, constrained position for months, was cured in twenty-four hours after proper treatment was administered. Another noteworthy chart is the one showing the number of mentally defective found by psychiatrists among the neuro-psychiatric cases reported from different states.

Exhibit 8. Army psychology tests. This consists of charts and photographs showing successive steps in army examination to test the mental capacity of officer and soldier. Classification of results and a table display of the materials used in these tests comprise this part of the exhibit. These mental tests were applied to men upon their entrance into the army to determine their mental intelligence for the purpose of placing them in positions for which they were best qualified. Those men who could read and write were placed in what is known as the "Alpha group," and they were given an examination to determine their grade of mentality. Those who could not read or write were placed in what was known as the "Beta group" and given a test of equal difficulty but requiring no reading or writing ability. Those who did not pass the Beta examination were given individual mental examination. This was an army modification of the Stanford-Binet or Point Scale, or a special performance examination devised by army psychologists to test foreigners and native illiterates. In the Beta test a blackboard was used to demonstrate to the subject what he was to do on the paper before him. For example, he was required to find his way out of a maze, to fill out missing parts of figures, such as drawing in the leg of a chair or the stem of a pipe, etc. The results of these examinations were sent to the personnel officer at each camp. In the Personnel Office, selections were made to fill requisitions according to the intelligence required in each occupation. The successful application of mental tests to army needs indicates

that they will be of considerable use in civil life in determining the fitness of applicants for different occupations.

Exhibit 9. Physical examination. Striking facts and results of the physical examination of our troops during the war are shown by legends and charts featuring this exhibit. These examinations developed the fact that out of over three million men drafted into the Army, 320,000 were found physically unfit for service.

Exhibit 10. Delousing. It is not generally known that all troops returning to the United States must pass through what is known as a delousing process. This is found necessary to free the soldiers from "cooties" or clothes lice, which were obtained in France. It is not only necessary to return the troops to their respective homes clean, but it is important to prevent the introduction of louse-borne disease in this country. The clothes louse transmits typhus fever, trench fever, and relapsing fever. The epidemics of typhus fever in Serbia, Bulgaria, Russia and Germany, which caused an enormous loss of life, were transmitted by vermin. Trench fever on the western front caused much concern by reducing the fighting strength of various units. The louse has transmitted more disease in the present war than any other disease-carrying insect. In fact, eradication of the louse in this war was comparable to the destruction of the fly in the Spanish-American War. With the program as now carried on, every soldier returns to his home clean and free from cooties, and precautions are taken to prevent them from transferring vermin to civilians. Up to the present time, not a single case of louse-borne disease has been introduced into the United States. The program consists of detention of two weeks at foreign ports, during which time universal delousing is practiced, inspection and delousing on transports when necessary and universal delousing in the United States. The delousing process is repeated to check up on the first delousing. The delousing process consists of sterilization of all clothing by steam. Steam destroys lice and their eggs and the germs concerned in the transmission of louse-borne diseases. Each soldier is examined for vermin and then given a warm bath. The hair is only clipped when nits are found. This exhibit consists of models used to rid the soldier of the cootie and is supplemented by photographs and charts showing the operation of delousing plants at home and abroad. The models exhibited are those of a Serbian barrel used for steaming the clothing, and the other is a portable "hot box" used in the front area for destroying lice and eggs. This box is based on the principle of the fireless cooker, and actually cooks the lice. A plan of the delousing plant used in this country is shown. Pictures are shown of Mr. and Mrs. Cootie and the germs that cause disease which are transmitted by lice.

Exhibit 11. Food and nutrition. Many new features of efficiency and sanitation in the feeding of soldiers are shown in the exhibit from the Section of Food and Nutrition. The experiences of the Spanish-American War taught the army the importance of adequate food inspection and of expert criticism of dietaries. The result has been in the recent war the most thorough system of food and mess inspection ever seen in any army. The Quartermaster inspects the food when it is purchased, the veterinary officer in the camps inspects all meat, and meat products, before they are delivered to the messes, and a nutrition officer of the Medical Department instructs the mess sergeants how to recognize foods of inferior quality when they arrive at the mess. The results of nutritional surveys conducted by this Section in all the training camps are shown in various graphs and charts. A mechanical device for balancing the ration and two different graphic schemes for the same purpose are features of the exhibit. There are numerous photographs of food and mess conditions in various camps.

Exhibit 12. Sanitation in camps and sanitary appliances. Charts and photographs and a full display of sanitary models and appliances are presented in this exhibit to illustrate the sanitation of the camp and

battlefield. The models include ice boxes, fly traps, incinerators, ovens, shower baths, grease traps, latrines, water heaters, etc., all in miniature, and in wood, stone and brick, comprising a total of about one hundred objects. This exhibit illustrates methods employed in the purification of water, the treatment and disposal of sewage, the collection and disposal of wastes, the control of mosquitoes and flies, and, in general, shows many of the principal features of camp sanitation.

Exhibit 13. Vital statistics, methods and results. In this exhibit are perforated statistical cards, one showing the results of physical examination of recruits, another showing the case of a man sick with influenza, another of a soldier who has received a battle injury, and another showing the method of arriving at the strength of various army posts. Charts are given showing the occurrence of venereal disease by states, as shown by a physical examination of the men. Another interesting chart is that showing the height and weight of soldiers as developed by physical examination, for certain diseases which may affect height and weight, and, in general, shows many of the principal features of camp sanitation.

Exhibit 14. War Museum of Army Medical Museum. This comprises three sections of materials which have been received from France monthly since the beginning of the European war. It includes a large collection of military weapons, rifles, machine guns, helmets, gas masks, etc. Another section comprises pathological specimens, and a third section a collection of wax models. The first section comprises military weapons and depicts the evolution of rifles, pistols and revolvers from olden to modern times. In this collection may be seen the old matchlock devised about 1500 and flintlocks dating back to 1650. Antique pistols and revolvers are also shown in a case along side the modern Colt, Remington and Browning automatics. The rifle exhibit includes types of arms captured from the Germans by American troops. There are also numerous types of English and French weapons on view, and for the United States various models from the 1917 rifle back to the rifle of Civil War days are shown. An interesting feature is a collection of guns in use in the Franco-Prussian War, as well as in the Russian-Japanese War. Among the latter are the Russian three-line rifle, and rifles used in the Spanish War, including the Spanish Mauser. Among Civil War guns is the old Springfield muzzle-loading musket, and in this group may be seen pieces picked up on the battlefield of Gettysburg. There is also an exhibition of types of foreign rifles adopted in emergency in the Civil War including the Austrian block gun and the Garibaldi musket from Italy, and the earlier breech-loading musket used in the Mexican and Indian Wars, and the old smooth-bore muskets of 1820 and 1830. Another interesting feature of this exhibit is a specimen of the pill-lock musket, a rare type between a flintlock and the percussion cap gun, which was fired by a pill-shaped capsule. Muskets of the Revolutionary period are shown including the flintlock and the wheel-lock musket types. A set of English blunderbusses which were carried on coaches and horseback in the period around 1650 are also shown. In this section of the exhibit the earliest type of gun, the matchlock, devised about the year 1500, is seen. In passing, it may be noted that even in these modern times some of the oriental countries use these old type guns. It is also interesting to note that in the late World War every available pattern of gun was brought into use, even the old flint- and matchlock types. Returning officers tell interesting stories of the different types of guns that they saw in use on the European battlefields. The collection of pistols and revolvers begin with the old matchlock pistols, the flintlock, percussion cap and the types used in the 16th and 17th centuries down to the modern service weapons. There are shown types of the Colt and Remington Arms in use since the Civil War period. There is also shown the latest German Luger automatic in use in the European War, as well as the American Browning. There is also a representation of

the different types of machine guns used in various armies. Specimens are shown of the German machine guns recently captured on the battlefields of France. In this connection is shown additional helmet pieces worn by machine gunners. An interesting exhibit is a French machine gun which was used by American troops when first they got into action. It has been named the "Chauchat"—"Hot Cat." The exhibit also includes specimens of shells used by light and heavy artillery and a various assortment of bullets and shrapnel which figured in the late war. A large collection of helmets — German, French, English and American—are on view, riddled with holes showing the effects of shell and rifle fire. A set of canteens, many of them peppered with holes, also shown that they saw service at the front. The same case contains a set of German medical supplies which were captured in action. Body armament which was worn by German shock troops which resemble the ancient Knight's cuirass and body shields, worn by the English, are also on view, and, in addition, there is also a series of barbed wire entanglements. A German antitank gun which was captured by our troops is also on display. In the same case is a wax model of a man showing the effects of the bullets fired by these weapons, and two old swivel guns, their prototypes, of large bore which were used in the Civil War. The gas mask exhibit includes a complete set from the earliest types down to the latest models. The first type used in this war was the celluloid mask, followed by a box respirator used by the British and similar equipment used by our own troops. The can outfits which were used extensively by the French and Germans are also shown. Another feature of this exhibit is a complete outfit of the German Draeger apparatus which is shown in the original box and as used by the German troops. Photographs are also shown illustrating the uses of these masks. A German gas helmet for use by wounded men is also shown. German maps of France, surgical instruments used by the Germans on the battlefield, and improvised crutches for their troops for use in the rear—all captured from the enemy in the late war—form interesting parts of this exhibit. There are several cases of wax models showing the effects of mustard gas burns, and also the effects of the gas on the lungs. Wax models are also shown of various forms of skin diseases and facial deformities. A hookworm exhibit showing the ravages of this disease in our Southern cities and the means of its control is of interest, as many of our Southern troops were affected by this disease. There is also a case of pathological specimens showing the effects of pneumonia on the lungs.

THE ROLL-CALL.

Upwards of seventeen million Americans have enrolled as members of the Red Cross for the year 1919. While the results of the Christmas Roll-Call have not reached the expectations of some of the projectors of the Greater Red Cross movement, they are withal very gratifying. There is no gainsaying that America's army of mercy has been perpetuated on a grand scale. The country and the Red Cross organization may well feel pride in the achievement.

Seventeen million persons in a single organization is a mighty big thing, just of itself. Numerically the persons thus registered almost equal the voters of the United States who cast their ballots for presidential electors at the election of 1916. The national spirit which the army of mercy reflects in concentrated form is something to thrill the world in the dawn of a new peace the same as it did in the depressing days of war. The power for service of such an organization is incalculable.

The Roll-Call was not a campaign for money; its only purpose was to enlist the human and the spiritual elements in a great work—a work of "Carry On" which the world war has idealized. The financial side of the equation was presented only in the charter requirement respecting the dues of the members of the organization. The significant thing is not that so many million

dollars have been contributed, but that every single dollar represents a bona fide member of the American Red Cross. That alone is the glory of the Roll-Call and the thing of which we all are proud.

When the idea of universal Red Cross membership was developed the war still was raging. Had it continued there is no doubt that the enrollment would have shown really stupendous figures. But happily the hostilities were brought to an end, the natural effect being to curtail much of the enthusiasm which war stirs in the hearts of men and women. Any feeling, however, that there would be a reaction inimical to the permanency of the American Red Cross on the broader lines planned, has been dissipated by the Roll-Call. Under the circumstances its result is wonderful. It further is to be borne in mind that physical circumstances, notably the prevalence of the influenza epidemic, greatly embarrassed the Roll-Call in many parts of the country.

The result should be an inspiration and a stimulus to all the active Red Cross men and women in the land. It should be an incentive for every Chapter to carry on with still greater energy. A noble start has been made towards the goal that originally was set. With concentrated interest the attainment of the universal ideal in the years to come is by no means impossible.—*The Red Cross Bulletin.*

Publisher's Notes

Among others who have "done their bit" and been recently released from the service is Barbital-Abbott. The Abbott Laboratories was one of the first to receive license from the Federal Trade Commission to make Barbital (formerly known as Veronal) and shortly after they began producing it the government requisitioned practically every ounce of their growing output. This, of course, left none for the medical profession which had hailed the original announcement that Barbital was being made in America as one of the great chemical victories of the war. Now, however, the needs of the government are nearly filled, and the Abbott Laboratories announce that they are ready to meet all trade requirements. They furnish a pure product, every lot of which is standardized by tests on animals. There is considerable cause for gratification in the fact that a firm so distinctively American as The Abbott Laboratories has shown its equality with the best that Germany could produce. It is up to us also to encourage and support the products of such unquestionably American houses that there will never again be danger of foreign domination of the American chemical industry. Barbital-Abbott is supplied in tubes of ten 5-grain tablets, bottles of one hundred 5-grain tablets and powder, in one-ounce bottles. Physicians desiring supplies will do well to take the matter up at once with their druggists, so that stock may be on hand when needed.

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